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ABSTRACT

The paper identifies important issues and trends to individualize education for gifted learners with educationally significant handicaps. Literature is reviewed in terms of five ways to understand modifying educational practice: (1) definitions (language used to order and organize knowledge and policies for service delivery) and designations (selection of terminology); (2) common attributes and identification procedures; (3) appropriate educational programing; (4) effective classroom environments; and (5) elimination of handicappism. Suggestions are offered regarding the individualized education program, location of resources, mentoring and advocacy, and access. (SB)

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PROMISING PROSPECTS

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College of Education Monograph Series

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PROMISING PROSPECTS

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Western Michigan University

July, 1981

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DEDICATION

This monograph is dedicated to two persons who have labored to expand opportunities for handicappers - gifted and otherwise. These persons are Dr. Jack W. Birch, of the University of Pittsburgh, and Dr. Marie Barry, of the U.S. Department of Education.

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PROMISING PROSPECTS

The theme promising prospects was selected with care. Any standard dictionary reveals prospect to connote a chance to succeed as well as to seek out potential. Promise indicates future excellence in addition to assurance for success.

A 1977 report of the Council for Exceptional Children by Maker (1977) outlined promising prospects for the gifted handicapped. Her survey of pertinent literature and her resume of model programs illustrated that the topic of gifted handicapped holds high interest to educators, to parents and to handicapped persons, themselves. Another sign of promise was cited by Reynolds and Birch (1977) in their account of the attempts by the American Association for the Advancement of Science to encourage opportunities among handicapped scientists. A 1978 issue of the National Association for Gifted Children publication, Gifted Child Quarterly, devoted to the handicapped, indicates interest (Khatema, 1978). The 1970s may well be remembered as a decade of renewed interest in the expansion of education opportunities for the gifted, in general, as well as for expanded interest in gifted learners of minority status, including handicapped populations.

Organization and Purpose

This paper was undertaken to identify important issues and trends to individualize education for gifted learners with educationally significant handicaps. A report by Frasier (1979) provided a helpful structure to organize information about these learners. She emphasized the culturally

disadvantaged gifted. The Frasier review suggested four ways to understand modifying educational practice: 1) definitions and designations, 2) common attributes and identification procedures, 3) appropriate educational programming, 4) effective classroom environments, and 5) eliminating handicappism. (This latter topic was added to her list.) The following presents each domain and its associated elements. This tactic follows Frasier's strategy.

Definitions and Designations

According to Frasier, definitions and designations subsume two categories of information. Definition describes the language used by practitioners, researchers, and service agencies to order and to organize knowledge and policies for service delivery. Designations, according to Frasier, characterize the perceptions of a majority population about a minority one. The construct designation describes the common labels which influence the behaviors of majority and non-majority persons.

Definitions

The term gifted handicapped is the joining of two labels, both of which connote abilities and potential as well as limitations and obstacles. Varied opinions exist as to the meanings of these separate labels, which influence perceptions about gifted learners with disabilities/handicaps.

Defining Gifted and Talented

The definition of gifted has approached an increasing consensus or agreement. According to Reynolds and Birch (1977), it is common practice

to encounter the term gifted being used to include giftedness and talent. The Federal definition of PL 95-561 has been adopted by a majority of states to guide their state policies and practices. This definition implies that giftedness and talent have one or more components: general intellectual ability, specific academic aptitude, creativity, aptitude in visual and performing arts, and leadership skills. Two distinct populations identified by this definition are demonstrated performance and potential for outstanding abilities. This definition acknowledges the contributions of gifted persons to solving significant social problems.

While this Federal definition has its advocates, alternatives have also been proposed. For example, Renzulli (1978) advanced his own perspective: an interaction among above average mental abilities, high levels of creativity, and high levels of task commitment. In his view, this interaction enables the individual to apply these three components to any potentially valuable area of human performance.

Both sources agree that learners falling under the label gifted and talented occur infrequently statistically in terms of the early emergence of their abilities when compared to their chronological-age peers. While the Federal definition dominates, Renzulli's emphasis upon task commitment identifies perseverance as a salient feature to account for the realization of one's own abilities.

Describing Handicap

Consumers and providers of services tend to agree over a definition of the term handicap. The common core of agreement recognizes a helpful

distinction between disability and handicap. Shontz (1980) describes disability as either medically based conditions or as those objectively verified by qualified clinical psychologists. The key idea about disability is its universal recognition regardless of cultural context. By contrast, handicaps are those limitations imposed upon disabled persons by cultural stereotyping as well as by environmental barriers. For example, a student who requires a wheelchair is not disabled in a one-floor school with access to classrooms, research facilities, non-fearful teachers, etc. This same student would be handicapped in a two-story building staffed by fearful and detached educators.

Turnbull and Schultz (1979) advanced the notion of handicap as describing particular disadvantages. They acknowledged the use of the term exceptional to describe learners whom adults perceive as exceptions to the general population. In this context, both gifted and talented learners share a common status of statistical infrequency in school age populations.

Describing the Gifted Handicapped

An early recognition of giftedness among handicapped populations can be found in Kirk's introductory text on special education (Kirk, 1962). Kirk proposed to designate the gifted child with a handicap. He speculated high intelligence could benefit a learner with a handicap. Kirk's presentation reminds and alerts educators that superior ability can co-exist with limitations in physique.

Maker and Grossi (1978) presented a more recent definition of the gifted handicapped; they wrote:

> . . . persons of outstanding ability or potential who are capable of high performance, despite handicaps such as visual, learning, or orthopedic impairments, emotional disturbance, or learning disabilities. They require special educational programs beyond those normally provided by the regular school program which takes both their giftedness and talent and their handicaps into account. (p. 1)

A definition of gifted handicapped learners should account for both sets of attributes: superior abilities and limitations of educational significance. An operational definition could be advanced to describe a gifted and talented handicapped learner as a person of school age whose demonstrated abilities and/or potential should certify him/her qualified to enroll in a program of individualized education for gifted and talented pupils, consistent with state provisions of residence. Similarly, the learner's current levels of physical, learning, and emotional development would qualifty the learner for individualized education consistent with the state educational code for handicapped/exceptional learners.

A principle to operate and to implement educational services is to arrange an individualized educational program, which addresses relevant pupil priorities to facilitate personal and social growth. Such development aims to nurture abilities combined with achieving appropriate compensatory tactics.

Designations

Understanding Options

The selection of terminology has practical implications in the life histories of individuals as well as in the effort by people to organize services.

That labels do have their consequences is well known.

Emerging Preferences

Among handicapped persons, there appears to be an emerging preference for the term handicapper. There is also an emerging preference for the term impaired. Neither term has gained clear preference. Professional preference retains the use of exceptional, although some individuals prefer use of the term impaired to defuse the emotional connotations of disabled and handicapped.

The term handicapper appears more common among college-bound persons and among those involved in self-advocacy groups for the handicapped. It draws its inspiration from the example of sport racing, which estimates odds for success. Philosophically, a medical problem/difference may constitute factors for such estimation. There are opportunities to succeed which involve the willingness to compensate. Still a person can choose to feel handicapped by self-pity. In a sense, the person is one's own handicapper. One can also choose not to impose self-defeating attitudes. Another reason for preference is to confront stereotypic impressions of the term handicapped. Being comfortable with the term handicapper may encourage non-handicapped persons to realize and to experience psychological comfort.

One practical outcome of uniform terminology would be the standardization of informational retrieval systems. The term gifted handicapped is usually selected since it is not altogether offensive to the population to be affected. A standard description could be helpful to prepare equitable legislation and public policy.

The key idea in such descriptions is the recognition that accelerated and superior ability can exist within populations labeled impaired, disabled, or handicapped. A deficit in one area does not mean an overall inefficiency. There is the need to maintain this realistic, positive presumption.

Understanding a Paradox

The fixation with words may seem overdone and insignificant to those free from perceived disability, but as Mark Twain suggested: There is a difference between "lightening" and "lightening bug."

Sawish (1980), among others, observed that labels influence self-identity. His interest was the effect of society's mixed messages to disabled persons. These mixed messages, in turn, create a paradox of confusion as to self-worth. The print and television media provide numerous examples. To cite but a few:

1. Prizing community inclusion against promotion of eugenic abortions.

2. The funding of services for disabled learners as against neglect of the gifted and talented.

3. Promoting the worth of the disabled as against required genetic counseling.

4. Promoting independence as against subsidies which foster economic dependence.

5. Advocating use of the term exceptional as against a White House Conference selection of the term defective.

Understanding Handicapper

The designation of a handicapper, according to Gentile and Taylor

(1976), is a person(s):

> . . . who reject social stigma about culturally ascribed characteristics and judge for themselves their own abilities. A handicapper is one who experiences a handicap only in certain situations or as a consequence of social stigma. (p. 2)

These authors, then, advanced implications of this designation for the practical guidance for handicappers. The following are reasonable inferences for guidance:

1. Learning the ways in which one's own physical or mental characteristics can and cannot direct one's own life.

2. Learning to reject the stigma, commonly associated with his/her characteristics.

3. Learning that one may be handicapped in some specific situation.

4. Learning that one can perform equally to, or above, an individual who does not experience a handicap in some specific situation.

5. Learning to predict one's abilities to succeed in personally satisfying situations.

6. Learning to act upon reasonable plans and decisions.

The validity and realism of the designation handicapper may unsettle some professionals. It is instructive for educators to be aware of the viewpoint associated with their philosophy.

Attributes and Identification

Attributes

Understanding Attributes

The term attribute is gaining acceptance among educational specialists as a replacement for the more traditional use of characteristic. Findings about teacher expectations and pupil performance have led to the conclusion that traits are assigned, or ascribed, upon perceived behaviors (Algozzine, 1976).

Social psychology has proposed to apply attribution theory to account for sources of teacher expectations as well as for sources of self-esteem. Numerous sources such as physical appearance, race, sex, and pupil behavior influence teachers. Labels, externally ascribed to learners, also have their effects. The process of attribution involves reaching a conclusion about a pupil's behavior and subsequently developing a generalized expectation. Learners, in turn, convert feedback from social interactions into an overview of their basic abilities (Brophy and Good, 1974).

Researchers, according to these sources, are not free and detached from this process. According to Whitmore (1980) and Newland (1976), investigations about the gifted have been conducted on the assumption that such persons possess absolute differences from other human beings. This notion of absolute difference describes the concept of characteristic. In reality, gifted persons share many common bonds rather than absolute differences. For example, all people share humor, creativity, task orientation, etc.

The concept of attribute offers the possible advantage of focusing attention upon behaviors, which suggests individualized education planning. Certainly, characteristics, or genuine differences, do exist; however, they are much fewer in number than attributes. Reynolds and Birch (1977), for example, observed the following:

1. Gifted and talented persons are characterized by an accelerated learning rate and advanced readiness for learning.

2. Sensory impaired persons are characterized by the obvious limitation of not seeing and hearing well.

3. Physically impaired persons experience restrictions in movement.

4. Learners with learning and behavioral disorders demonstrate a gap between performance and potential.

Properly handled, educators can use the concept of attribute as functional observations, to identify pupils who would benefit from appropriate modifications. Furthermore, attribute theory recognizes that negative behaviors can indicate positive action. Experience has shown that disturbing (opposed to disturbed) learner behaviors are responses to boredom, frustration, and self-criticism and can identify pupils who are unchallenged.

Another advantage matches identification tactics to educationally significant attributes. This match ensures continuity among program goals and program services.

Another benefit could well be the elimination of stereotypes about learning potential. According to Whitemore (1980), educators could be more alert to increased possibilities regarding pupils.

A starting point for identifying the attributes of the gifted handicapped, according to Maker (1977), is the recognition that superior and accelerated human ability can exist in handicapped learners. A second starting point is to recognize that such learners deserve an individualized educational plan, addressed to both the learner's outstanding abilities or potential as well as to the educational significance of his impairments/disabilities. The recognition that the learner and the family can provide helpful insights for educational planning offers another starting point.

Attributes of Underachievement

Maker (1977) acknowledged that underachievement can become a troublesome issue in organizing programs. Whitmore (1980) has also acknowledged this dilemma. Since both Maker and Whitmore are experienced educators of both the gifted and of gifted learners with handicaps, their insights deserve attention. They have identified the following issues:

1. In what ways might underachievement be defined and assessed?

2. In what ways is underachievement a problem for the learner and/or a problem within the school environment?

3. In what ways might schools eliminate and/or significantly reduce underachievement among gifted handicappers?

Underachievement is commonly described as a gap, or discrepancy, between one's actual performance and one's potential or measured aptitude. To comprehend underachievement, one needs to recognize that it is a single term, which encompasses too much data.

Underachievement, as a single term, attempts to account for at least

four related constructs: 1) duration, 2) scope, 3) effects, and 4) revelation (Whitmore, 1980).

Duration can be temporary or situational because of such crises as illness, changing schools, etc., or it can be chronic and a longstanding problem. Its scope can be limited to a specific, single ability (i.e., handwriting, computation, etc.), or it may be limited to a broad content area such as language arts. Scope can also include overall performance in which no area of achievement excels over any other. Its effects can be mild or moderate, which suggests that the student experiences no loss of self-esteem, nor does underachievement disturb others in his/her environment.

There may be three ways in which underachievement is revealed. These include: 1) high aptitude scores but low achievement scores; 2) high standardized achievement scores, but low grades due to poor work/study habits; and 3) unknown or variable conditions. This latter category can mean either that the learner's ability is masked against standardized assessment, and/or the student's "satisfactory" performance "masks" underachievement.

Understanding underachievement in its four dimensions can lead to individualized identification. It can also lead to individualized prescription of intervention.

Both Maker (1977) and Whitmore (1980) advocate a position that underachievement is a problem of school. They point out that underachievement has been viewed as a problem of the child and/or of the child's immediate environment, and they advanced the premise that some underachievement behaviors are a learned response to educational neglect. Also, they identi-

fied school practices which cause vulnerability to underachievement in handicappers.

Two specific targets for schools to reduce underachievement are to recognize that: Underachievement is the school's problem, and that underachievement is a generic term describing four components of behavior. One additional consideration exists: comprehending the sources of vulnerability to underachievement which are learned behaviors (Whitmore, 1980).

Pertinent sources of underachievement as learned behavior can be identified as:

1. Perfectionism -- a discontent with performance which falls short of personalized expectations and standards; it confuses error with absolute failure.

2. Unrealistic expectation -- goals endorsed by adults for their own ego needs and/or the insensitivity of adults to recognize that ability in one area does not always apply to others.

3. Social isolation -- the separation of gifted children from interaction with non-gifted peers and/or the lack of opportunities to acquire skills valued by one's peer group; isolation can also emerge because of the gifted child's advanced sensitivity to ideas and empathy.

4. Lack of individualized educational programming -- the obvious neglect by schools as well as inappropriate curriculum, instructional style, and a classroom climate which prizes the status quo.

The child's overt behaviors can be classified into two syndromes, one of aggression and the other of withdrawal. A third syndrome was labeled

by Whitmore (1980) as an "in-between" group. Withdrawn behaviors become a defense against low self-esteem. The inclination is to daydream, to isolate oneself and to avoid communication. Aggression is open combat either to gain attention and/or to reject "silly" assignments. The third group has more difficulty with task behaviors and motor performance tasks.

This suggests educators should use more diverse tools to assess and to seek out gifted and talented learners from populations identified within the special eduation service system for the handicapped. This can also mean pupils from known populations of underachievers within the schools (Maker, 1977).

Attributes of Achievement

One central attribute of achievement among disabled populations is a belief in an individual's abilities to succeed. A related attribute is the belief by adults (i.e., parents, siblings, educators, mentors, and advocates) in the person's abilities to succeed (Whitmore, 1980).

The attributes most frequently displayed by gifted handicappers who achieve success can be listed as specific behaviors:

1. Attention -- the learner consistently is attentive to tasks and perseveres in pursuit of task achievement; learner is relatively free of distraction and turns in assignments.

2. Activity -- the learner uses and manages his energy; learner is free from restlessness and random movement from task to task.

3. Self-concept -- the learner is confident of his/her abilities and anticipates success; learner is free from notions of self-defeat and of self-devaluation.

4. Locus of control -- the learner associates achievement with his/her own efforts; learner can manage ambiguity and lack of structure and is free of impulsiveness and the feeling that success is a function of luck.

5. Socialization -- the learner is motivated toward social approval and has mastered appropriate tactics to earn popularity with peers; learner is free of inappropriate aggressive or withdrawn behaviors.

Maker (1977) found creativity, self-concept, and achievement to be clusters of achievement among gifted handicappers. She observed that persistence and perseverance motivate success.

Creativity among gifted handicappers does exist. As noted elsewhere, adaptation, per se, requires handicappers to complete higher order processes and to achieve success in settings and careers suited to a non-handicapped majority (Sawish, 1980).

More specific generalizations about creativity can be inferred, however limited. Both learning disabled and behaviorally disabled gifted handicappers possess creativity; however, exact inference is difficult to obtain because giftedness is equated with high IQ, which can exclude these learners from research studies. Sensory impaired persons reflect comparable skills in flexibility with their non-handicapped gifted peers. Specific dimensions of creativity emerge with increasing age (Maker, 1977).

All groups, except the learning disabled, reflect concern about the individual's identity as a whole person and are especially responsive to responsible educators. The learning disabled gifted handicapper appears most vulnerable to loss of his/her self-esteem.

That comparative studies are usually conducted during treatment for emotional maladjustment, rather than during follow-up, is a major obstacle to understanding disordered behavior.

Whitmore (1979) identified three other attributes to associate with achievement among handicappers: 1) initiative, 2) independence, and 3) advanced problem-solving skills.

Initiative describes resourcefulness in pursuit of topics of internal interest with a minimum of structure or supervision. Independence denotes behaviors of sustained effort and curiosity to explore one's environment. Advanced problem-solving skills emerge as leadership behaviors, as well as a clear preference for activities beyond recall and memory exercises.

The salient point is that these positive attributes can be misinterpreted by adults, which suggests that persistence and initiative can be viewed as stubbornness. Problem-solving preferences can be viewed as resistance to practice. Consequently, identification procedures should be sensitive to possibilities for misinterpretation.

Identification

Depending upon the source, identification can cover a range of activities (Laycock, 1979). A typical array of such activities would include: 1) referral or nomination by teachers and parents, 2) selection and administration of assessment tools, and 3) certification of eligibility. Transforming data into prescriptions or individual goals is separated into a subsequent step; also, this can be included as the end product of identification.

Laycock (1979), and others, regard identification as a high priority

and attribute of educational quality. Identification matches the tools of assessment to the school's definition of gifted and talented. Above all, procedures should be consistent. For example, a district may include general mental ability and specific academic aptitude in its definition. A district may also espouse talent as a program objective. However, that district may use only an IQ cut-off for placement, ignoring academic performance or the judgments of music, art, or drama teachers.

Clark (1979) acknowledged the work of Blancher-Dixon and Turnbull (1978) and Karnes and Bertschi (1978). All three sources agreed that identification begins with recognizing that giftedness can exist within handicapped populations. Clark (1979) suggested that initial identification procedures should begin with pupils already enrolled in special services for the handicapped. All three sources also agreed that teacher observations should supplement formal, standardized procedures. They also generalized that available instruments can be adapted in non-discriminatory ways.

A central focus of Clark (1979) was to identify handicapped learners, within her experience and scholarship, as mobilized toward disabilities and deficits. She urged educators to alert themselves to attributes which suggest attention for advanced development, as well.

Understanding General Principles

There is sufficient information about identification to identify consistent principles for both the gifted and the gifted handicapper. Some difficulties in the identification of the gifted handicapper represent inherent symptoms of the difficulties associated with identification of gifted pupils,

in general. Still, there are "truths" about identification which lead to reduction of error in assessing demonstrated abilities and/or in estimating potential.

One guiding principle for identification is to recognize what identification can do and what it cannot. For example, Joiner (1976) observed that identification does not, by itself, lead to improved instruction. He noted that identification to be of value must improve educational opportunities for the learner.

Improvement of education for the disabled gifted pupil, according to Elkind (1973), stems from the following basic practices: 1) attention and sensitivity to strengths, 2) continuing evaluation, and 3) actively pursuing gifted handicappers. These tactics expand possibilities for effective assessment.

Enrollment in an individualized program provides opportunities for identification, according to Gerken (1979). This principle suggests that guided observation can yield actual and documented instances of the learner's use of higher order processes as well as showing the uniqueness of products. She urged educators to gather and to refine assessment data continuously.

Another principle, cited by Joiner (1978), is to recognize that identification takes place within a given context. He advocated in-service training to establish a helpful context to identify all participants.

Identification has its frequency of hits and misses, which can be controlled by acknowledging the limitations of the assessment procedures.

These limitations can be described as sources of error in assumptions about: 1) the impact of examiner behavior, 2) the bands of behavior measured, 3) the variety of response modes, and 4) the impact of language of test content.

Joiner (1978) also advocated a principle in which the educator becomes an informed consumer of tests and testing procedures. He suggested his principle should include in-service training about: 1) age range of a test, 2) time and expense in administration and scoring, 3) ease of scoring, and 4) evidence of validation.

Another priniciple which becomes pertinent to gifted handicappers, advanced by Gerken (1979), relates to the end produce of identification. Comparing gifted handicappers with other handicappers, as well as with non-handicappers, is a useful device. These comparisons can suggest appropriate modifications of instruction.

Evolution of individualized goals and objectives for the learner is also beneficial. These goals and objectives, in turn, should formulate the basis of an individualized plan for education.

Identifying Helpful Modification for Handicappers

Suggestions for reduction of error in assessment procedures among handicapped persons have been advanced by Sattler (1974). Addressed to examiners, his discussion overviews: 1) prerequisites of the learners, 2) modification of procedures, and 3) options in interpretation. He identified the following populations that risk under prediction: 1) the emotionally disturbed, 2) the brain-injured, and 3) the physically handicapped.

The prerequisites of learners are those assumptions which either the

examiner and/or test producer perceive to offer valid expectations. According to Sattler, we commonly assume that children and youth are motivated to succeed and to please adults. A second assumption is that the person under examination has a life experience free of frustration in achieving appropriate goals. Thirdly, there is the assumption that an individual engages in behaviors of adaption appropriate to the majority of learners. Finally, we assume that the person has sufficient physical and psychological maturity to respond to the reasonable and standardized demands of test items.

Sattler (1974) reassured examiners and consumers of assessment data that modifying standardized procedures does not decrease the validity of results. His view was that applying common sense modifications increases the validity of results. He advocated the following as concrete instances of common sense practice. Before testing, the examiner should evaluate the following: 1) the child's vision, hearing, speech, coordination, and balance, 2) the child's ability to indicate "yes" or "no" non-verbally, 3) his/her reading and writing skills, and 4) his/her level of physical stamina.

The modification of time became a frequent element of emphasis to Sattler (1974). For example, a test might expand to cover several days, because time limits can be expanded without penalty. Likewise, another procedure could be to provide primary reinforcement to reassure pupils. Sattler also advocated the use of coaxing and praising for encouragement.

Specific recommendations for specific pupil populations were also advanced by Sattler (1974). These recommendations are summarized as follows:

General Category	Significant Behavior(s)	Examiner Responses
1. Immaturity and resistance to adult	Negative or refusal	--Offering choices; e.g., would you like this or that?
	Frightened	--Engaging in items quickly; avoiding explanations
	Non-speaking	--Beginning with performance items first
	Distractible	--Accelerating presentations
2. Emotionally disturbed	Withdrawn and evasive	--Offering more than one testing situation
	Actively acting out	--Using primary rewards regardless of correctness of response
3. Brain injured	Perseveration	--Distracting the child into responding
		--Minimizing distractions in the testing environment
	Impaired self-esteem	--Parent notifying the child prior to examination

General Category	Significant Behavior(s)	Examiner Responses
		--Prior admittance into the examination room
		--Converting test to play situation
	Integration/Concept formation	--Rephrasing/repeating question
		--Allowing child time to organize response
		--Proceeding at child's pace
	Catastrophic reaction	--Gradually introducing test items
		--Avoiding implications of failure
		--Reverting to items previously passed
3. Visually impaired	Adequate vision for performance items	--Emphasizing verbal items
		--Recognizing that partially-sighted pupils experience uncertainty about performance
4. Crippled/Cerebral palsied learners	Restrictions in range of motion	--Selecting tests to to match child's abilities

General Category	Significant Behavior(s)	Examiner Responses
	Restrictions in fine motor skills	--Offering several testing sessions
	Incidence of additional disabilities of speech, vision, and hearing	--Using caution in assuming validity and reliability of tests
5. Hearing impairment	Adequate hearing for performance items	--Attending to lighting items and examiner's face
		--Recognizing that hard-of-hearing students may fake impressions of comprehending directions

Strengthening Identification Tactics

There are at least two ways to strengthen identification beyond helpful modifications of administration and interpretation. One method would be the realistic adjustment of obtained assessment scores, as suggested by the SOMPA procedure. The other would be to implement a matrix procedure, which can account for nomination, observational, and/or product data.

A realistic adjustment of obtained assessment scores reflects a philosophy to make existing instrumentation work better, which means reducing error in measurement. Applied to gifted handicappers, this would help estimate the person's current level of performance as if the person had

never experienced physical or sensory impairment.

A procedure which reflects this as if stance has been advanced by Mercer (1979), a procedure known as the System of Pluralistic Multicultural Assessment (SOMPA). She has directed her work toward reducing error in the Wechsler Intelligence Scale for Children - Revised (WISC-R). The Mercer System requires a particular orientation toward assessment and interpretation. This orientation views tests of intelligence as another type of achievement test, which means that an IQ is more properly viewed as how much a person has learned from his/her environment rather than as an indicator of genetic potential. Finally, the IQ is viewed as a measure of current abilities, not as a future estimate.

Mercer (1979) devised a medical "model" component with which to adjust score based on known relationships. This approach used known relationships between performance on the WISC-R and 1) visual motor performance , 2) visual acuity, 3) aural hearing acuity, 4) physical dexterity, 5) weight and height, and 6) birth/health history. (SOMPA provides assessment tools and family interviews to gather these data.)

The results of SOMPA evaluation are added to the adjustments of an obtained score which yield according to Mercer (1979), an estimate of learning potential. This modified score describes the child as if he/she had not experienced a handicapping condition. (There are also models based upon family/cultural and pluralistic attributes.)

The SOMPA procedure, in effect, standardizes what should already be a standard procedure. Furthermore, SOMPA provides an objective, numerical base for weighing these factors.

Another alternative, as well as possible supplement to SOMPA, would be a matrix system, which refers to an arrangement of data and reference points. Baldwin (1978) developed a format to list pertinent sources of data and to list the learner's relative status in the creation of an identification matrix. Relative status could be a five-point scale, expressed either as percentiles, stanine scores, and/or as a percentage. A rating of 5 would be equal to the the 95th percentile, a stanine of 9, or 95 percent of "points on inventories." A rating of 4 would refer to the 90th to 94th percentile, a stanine of 8, or 88 to 90 percent. A 3 rating would relate to the 85th percentile, a stanine of 7, and 75 percent. A 2 rating would correspond to the 80th percentile, a stanine of 6, and 65 to 70 percent, and so forth.

Data sources can be standardized tests, which can be converted to percentiles and stanines. Rating scales, observation forms, inventories etc. can be converted to percentages.

The pupil is given a check from 1 to 5 for each data cell. This matrix, as described by Baldwin (1978), allows for qualitative data to be obtained from observation, inventories etc., to fulfill the Alvino and Wieler (1979) position to improve identification. This means that Baldwin's matrix concept can account for performance (objective scores), process (thinking and behaviors), and product (exhibits, models) data. Since each cell is totalled, some learners can compensate for "low" performance by "high" product or process ratings.

Another advantage of the matrix approach is that it allows for local options. There is freedom to select and to include data sources. There

is also freedom to define the range for each of the five settings.

A Promising Prospect

A concrete example of educational practice which reduces error in assessment and which facilitates individualized assessment is well known to educators who specialize in the problems of handicapped children and youth. This practice is a requirement of national public policy (PL 94-142) and of verified educational research. This practice is known as the Individualized Educational Program, or IEP.

There is reason to believe that IEP as a policy, process, and product is emerging as a preferred practice among educators of the gifted and talented. It is reasonable to suppose, therefore, that IEPs can become a rallying point for educators, parents, and the gifted handicapper to plan and deliver individualized educational service.

One of the attributes of an effective education for the gifted, in general, would be evidence of individualized education. The IEP concept would be one concrete means to do so. Consequently, the IEPs of handicappers could be addressed to demonstrated current or potential abilities.

Appropriate Educational Programming

Modern trends in education are toward individualizing instruction, which means, according to Berneman and Dexter (1980), matching pupil aptitudes to instructional strategies. A key figure in conducting individualized education for handicappers, according to Parish and Kok (1980) is the mainstream teacher (i.e., the regular classroom teacher who receives the handicapper under provisions of an Individualized Educational Plan).

Effective educational programming can be described as administrative policies to support teachers in individualized education. There is sufficient information; the need is to act upon available knowledge.

Identifying Foundation Concepts

Three factors influence educational policies for gifted handicappers. These factors are identified as foundation concepts for policy and practice and can be summarized as: 1) knowing available data about gifted and handicapped learners, 2) understanding stereotypes and their limitations, and 3) applying principles of learning.

The Known and Unknown

While available knowledge to guide current educational practice exists, the future will emphasize new and pressing needs. Renzulli (1980) identified priorities to extend professional practice for gifted education, which included: 1) evaluation, 2) identification, 3) process models, and 4) learning style.

Renzulli made two points about evaluation. One point was a reminder that gifted programs of quality willingly document the program's effort and

results. His second point was that group testing contradicts the individualized nature of the programs. That is to say, individualized programming should offer individualized assessment. His guidance was to develop valid means to assess pupil results.

Identification, according to Renzulli, should strike a balance between general ability, creativity, and task commitment. He deplored the educational practice of identifying by reference to cut-off scores as a measure of intellectual or academic performance.

The issue of process models was vigorously pursued by Renzulli. He did not attack the work of Guilford or Bloom, per se. Rather he disputed their implementation in individualized programs for gifted learners.

Renzulli isolated continuing misunderstandings about these models. First, educators should remember that the model of Bloom and Guilford accounts for common human behavior, not merely gifted learners. Secondly, educators should comprehend that higher order processes depend upon basic facts and content. As a related concept, processes are not divorced from content. A third misunderstanding is to ignore a prime source of motivation for gifted learners in product development and recognition, which argues that processes do not exist in isolation. Processes are tools to convert information and experience into useful and/or unique products.

A final consideration becomes understanding the influence of learning style and/or learning preferences. Renzulli observed that preoccupation with accelerated learning rate and advanced readiness can create an almost

exclusive reliance on accelerated tactics of programming. He urged the use of enrichment, or expanded curriculum, as appropriate for the learner.

A review of relevant issues about the education of handicapped pupils by Reynolds (1980) complements the work of Renzulli (1980). Both reviews provide guidance to educators who attempt to synthesize gifted with handicapped. Reynolds isolated capacity, its measurement, and categories for discussion as points of emphasis, selected for their relevance for programming.

Measurement of capacity, according to Reynolds, becomes narrow bands of reference points. A more helpful view would be to recall that any obtained score is subject to errors of measurement. Furthermore, capacity, or potential, is susceptible to treatment. Consequently, capacity/attitude interacts with the various properties of learning style. This idea constitutes the basis for an educational construct, labeled by Reynolds as the Aptitude Treatment Instruction (ATI) model.

The effects of labels to condition educator expectations were also reviewed. A key idea was that no handicapped learner, especially the learning disabled or behavior disordered, possesses all of the group's attributes. He pointed out that individual differences within categories exist just as they also do between categories. Reynolds emphasized attention to tasks required of the learner, not attention to his/her label. He regarded the ATI model as a promising prospect.

Identifying Stereotypes Which Limit

Both Maker (1977) and Whitmore (1980) isolated stereotypes held by

administrators and teachers which limit educational opportunities for gifted handicappers. These stereotypes were found to be sources of inaction; they identified the following as the most frequently encountered:

1. Superior abilities cannot be assessed until third grade; consequently, individualized education need not be undertaken for kindergarten and the primary grades. (The evidence is otherwise.)

2. All gifted children are well rounded in varied performance dimensions, physically healthy and coordinated, and well adjusted. The harmful effect of this belief is its emphasis upon all, and its source can be traced to the pioneering effort of Terman's work. (A resumé and current up-date has been prepared by Coleman, 1980.)

Terman's work was valuable to replace the "mad scientist" stereotype. However, it also created a "new" stereotype, the "Termanite." This image, in turn, had its subtle effects: ignoring those capable persons who did not fit the well rounded, well adjusted, and physically fit image. Furthermore, it relied too much upon the individual intelligence test score.

3. Gifted persons get along very well in life, despite inappropriate school programs. Typically, Thomas Edison and Albert Einstein are cited as "proof." This stereotype excludes mentoring. This view overlooks the fact that eminent persons may be indifferent students in school. However, these same persons were not indifferent scholars, once provided access to mentors who provided guidance, instruction, and recognition.

4. Handicapped learners are best served under provisions of education for the handicapped. The "best" provision, according to Maker (1977) and

and Whitmore (1980), is a team effort. Furthermore, they urge educators to target substantial effort toward the learner's need to develop ability and talent.

5. Selection for individualized educational programming and intervention can operate by means of a "cut-off" score on individual intelligence tests. This stereotype, in reality, is not confined to restricted opportunities for the gifted handicapped. Busse and Mansfield (1980) observed that gifted programs are most vulnerable to this significant and persistent discrepancy. Program orientation can declare support for the Federal definition with its emphasis upon two populations (i.e., demonstrated abilities and potential abilities) and five goals (general mental abilities, leadership, creativity, specific academic aptitude, and visual performing acts). The actual result is to employ a narrow band of IQ for selection; this favors learners of demonstrated abilities and emphasizes specific academic abilities.

6. Superior ability and outstanding achievement among handicappers is a fluke, or an accident. This view neglects serious studies of the person's compensatory tactics as well as identifying helpful environmental conditions. This view also discourages viewing handicappers as capable and talented persons.

Applying Principles of Learning

There is sufficient information to generate principles of learning to guide educational practice. These principles of learning can be identified, according to Carlson (1980), by using the context of probability. That is to say, application of general principles increases the odds for learner

achievement. She emphasized the education of pupils with learning/emotional disorders.

The principle of meaningfulness suggests that motivation increases learning and that teachers need to assess their criteria for selecting content.

The principle of responsive environment describes treatment attributes. Boredom, frustration, and unpleasant physical conditions create obstacles. Effective alternatives are challenging tasks, immediate feedback, and rewarding student effort. Such task novelty inspires learners' attention, or active participation in learning, (e.g., relating the known to new content).

There are four principles which can be related to teacher behavior. Application of learning principles of teacher behaviors would involve 1) modeling, 2) distribution of practice, 3) fading, and 4) communication of structure.

Modeling refers to retraining initial learning by watching and imitating a performance. The viewer should observe the performer and should receive rewards as a consequence of the performance.

Distribution of practice relates to the attention span of the pupil. In general terms, short instructional periods are preferred. However, "short" and "long" grows from the child's frame of reference.

The principle of fading describes the use of prompting, using examples or aids etc., which should be withdrawn at the learner's pace. Teachers need to be alert to the learner's need for assistance.

In many ways, all these principles structure communications between teacher and learner. Teachers should share their intentions with learners. It also suggests that teachers need feedback from students as much as students need feedback from them.

Understanding Individualized Education Programming

Identifying Origins of the IEP

Individualized Educational Programming is not necessarily new, as much as it is a rediscovery of a valued tradition. For example, the case study method has a prominent and honored status in gifted education (Clark, 1979). In fact, Renzulli and Smith (1977) have shown the case study method to be a cost effective as well as efficient means of identifying gifted learners.

A related development was a mandate of PL 94-142 Education of All Handicapped Children Act, which requires, at least, an annual written review of a handicapped learner's educational program. This mandate is known as the Individualized Educational Program, or IEP.

There appears to be consistency between the case history tradition and the IEP mandate. It was once fashionable to speak of differentiated eudcation for the gifted, as though such education were totally different. It is now more accurate to speak of individualized educational programming rather than of differentiation. The shift in terminology offers accuracy and precision. It also provides the advantage of defusing reactions endorsing snobbish, separatist education (Birch, 1979).

Another origin of the IEP concept can be traced to increased knowledge about learning style (Griggs and Price, 1980). This procedure demonstrates the effectiveness of matching learner preferences regarding learning (i.e., preference for sound/non-sound, visual/auditory, tactile modes, self-study/small-group etc.) with available options.

Finally, there has been a reaffirmation of teamwork among parents,

educators, and other resource personnel (Woodruff, 1980), which motivates confidence that the process can work and can be productive.

Describing the Scope of an IEP

The IEP is a written document. It should summarize available information rather than repeat current data. Borrowing from PL 94-142 experience with the handicapped, and based upon available experience within gifted education, common agreement does emerge over the content of the document and over who is to produce it, although understandable variables exist as to the procedures for collecting information. There are also variations as to the assembly process for the team and for the appeal of decisions (Lewis and Kanes, 1978).

According to the Council for Exceptional Children (1978) and Caster (1977), the basic IEP content consists of the following specific components:

1. Statement of the child's present level of functioning.
2. Description of the child's learning style.
3. Overview of identified annual goals to be completed by the end of the school year, along with identified consistent short-term objectives.
4. Description of starting and ending dates of services.
5. Summary of the extent to which services will be conducted in the regular classroom or within separate facilities, programs etc., with justification for pull-out from the regular classroom.
6. Listing of the individuals who will be responsible for implementing the services.
7. Outline of the objective criteria and schedules for evaluating, at

least, the short-term objectives.

8. Statement of services and pupil needs for specialized media and equipment required to meet short-term objectives.

Butterfield, Kaplan, Meeker, Renzulli, Smith and Treffinger (1979) have advanced criteria for evaluating the adequacy and selection of IEP content items. Their review of an IEP format questions whether the content of the IEP reflects:

1. Implications from the theoretical and/or research literature about the significant attributes of gifted learners.

2. Information relevant to the modifications of school curriculum and policies.

3. Information pertinent to development of: a) goals and objectives, b) needed resources, c) anticipated pupil products, and d) concrete implementation steps.

Such questions also implied that attention should be addressed to emphasize nurturing "higher order abilities" and challenge based upon either Bloom or Guilford. Butterfield et al noted that merely "adding on" to typical school outcomes is self-defeating for both pupils and educators.

It should be noted that examples and sources of information about IEPs for the gifted do exist. For example, Pennsylvania, Idaho, Florida, and California, according to Lewis and Kanes (1978), maintain IEP requirements; and this list is, no doubt, expanding. The Davis (1978) report illustrates how both cognitive and attentive goals/objectives can be incorporated using Bloom's work. Hedbring and Rubenzer (1979) have proposed a format which

is based upon Guilford's work.

An unresolved issue is the use of IEPs for gifted handicapped learners who reside in states where there is no mandate for the gifted and talented. The issue is the extent to which IEPs under the PL 94-142 mandate for the handicapped could be extended to include the learner's needs and status as gifted and talented.

Potential and Proven Benefits

The IEP is developed by a team process which uses procedures to assess the pupil and educational/community resources. The minimum members of the IEP team consist of: 1) the regular classroom teacher(s), 2) the parent(s), 3) the school district staff person most directly responsible for supervision of the IEP, and 4) the learner, if appropriate. These members have the option to enlarge the membership as needed (Caster, 1977, and Council for Exceptional Children, 1978). A pertinent consideration here is the extent to which the IEP can demonstrate value. Such documentation should focus on the learner, the IEP participants, and/or to the school district (Lewis and Kanes, 1978).

Rubenzer (1979) shared his experiences matching identification and program planning data to program evaluation. (He also listed specific assessment tools for each attribute of the Federal definition.) The Deno and Mirkin (1980) report affirms the advantage of relating IEP content to program evaluation and improvement. Both reports illustrated how the IEP can become a data base for decision making. Questions which can arise from review of IEPs include:

1. What reasons prompted learner referral and conveyed the need(s) for program modification, a resumé of learner/school problems in its standard practice?

2. What program plan(s) were the most effective and also the least restrictive in resolving problems?

3. How are program modifications being implemented, and what school operations are adequate and which require improvement?

4. In what ways have modifications moved the district to reducing problems and in what ways have modifications moved the district toward program quality?

Lewis and Kanes (1978) also affirm the IEP as a means to achieve educational quality. They observed, as have others, that evaluation is often the missing link in program quality. They also observed that this neglect need not exist if IEPs become standard procedures. They viewed curriculum modification as a benefit of IEPs. They, as others cited in this discussion, advocate the IEP as an example of a concrete means to achieve individualized instruction for the learners, a rallying point for teamwork and for individualized program management through evaluation.

Gaining Access

Access as a concept means approach. Its Latin roots suggest the right to enter. Present legislation and enlightened opinion connote access as the removal of unnecessary barriers restricting physical, psychological, and social participation of gifted handicappers.

Access can also mean the prudent use of the least restrictive environ-

ment. Although there has been confusion about what constitutes least restrictive environments, there has been sufficient experience in the least restrictive environment concept to identify helpful supportive services. This experience has been gained with gifted school and college age handicappers.

The Least Restrictive Environment

Current practice in the public schools is predicated upon the unnecessary isolation and segregation of handicapped pupils. This practice is strengthened and protected by PL 94-124 and Section 504 of the Vocational Rehabilitation Amendments of 1973.

The inclusion of handicapped pupils in public schools has been labeled variously as bringing them into the mainstream, providing them with the least restrictive environment, and as providing for their appropriate education. These labels are often used synonymously, although Dybwad (1980) favored quite the opposite. A positive and accurate view of mainstreaming suggests there is a wide range of options for access to education, not just the regular classroom, according to Woodward (1980). Appropriate education means that decisions are based upon individualized matching of learner attributes with individualized selection of learning strategies. Least restrictive environments are standard, regular, normal settings, employed as the first, but not the only, choice. Legislation prizes diversity of options rather than the imposition of only one option (regular classroom) for the learner. Controversy exists among the professional community. The central focus of Dybwad's review pinpoints the inclusion of handicapped learners within the mainstream. He argues that it does work and has positive benefits for both the handicapped

and the non-handicapped.

One can only speculate about "out-of-hand" resistance to including handicapped learners given advances in developing assessment techniques, prescribing individualized goals and objectives, matching alternatives, and evaluating and comparing outcomes to decisions. Certainly, there is a rich literature to guide practice.

The rallying point for such decisions could be the Individualized Educational Plan (IEP) according to Swick, Flake-Hobson, and Raymond (1980), among others. It is a mandate of PL 94-142 and it is a tool to effect family and educational communications.

The inclusion of handicapped learners with the non-handicapped is based upon extensive literature, according to Guinaugh (1980), Tunick, Platt, and Bowen (1980), and Donaldson (1980), to cite but a few. A common theme from these sources, and others, is that pre-planning and teacher support services are helpful. They conclude in favor of implementing IEP and that inclusion should not be left to chance.

Identifying Helpful Support Systems

Selection of the least restrictive environment will be decided on a person-by-person basis. The decision to use specialized environments, such as residential schools, special day schools, and self-contained classrooms, will depend upon the learner's need for structure, which is intended to maximize learning principles. In actual practice, however, no specialized service is ever totally segregated, or isolated. Residential schools and other special education services necessarily practice some form of inclusion of their pupils within mainstream settings (Reynolds and Birch, 1977).

Certainly, inclusion within mainstream settings is best facilitated by a system of support. The purpose of support is to provide consultation for either the handicapper and/or the educator. The intent is to nurture and to facilitate inclusion of the handicapper in the most appropriate educational setting.

Inclusion is not new; rather, educators at present are more in a state of renewing earlier practice. Current legislation and enlightened practice have identified support services to maximize the widest possible opportunities for education and career development. The types and the number of support services required vary according to the individual person. Although an obvious principle, not all persons who use wheelchairs require the same support services, for example. This modest principle is one justification for the individualized educational program.

The pre-planning and installation of support services can be accomplished by recognizing goals (ends) and means of such services. Public schools, institutions of higher education, and advocacy organizations can provide practical guidance. The goals of supportive services are to provide education which prepares gifted handicappers for 1) full employment with adequate income, 2) using transportation and recreation, 3) learning skills of independent living and family responsibilities, 4) acquiring responsibility for one's housing and health care, and 5) exercising civic responsibilities such as voting and maintaining civil rights. These declared goals of handicappers are not significantly different from the common goals of American education in the public schools (Birch and Johnstone, 1975).

Supportive services, within the schools, are identified as coordination and organization of services for 1) providing appropriate technology, 2) improving communication and removing communication barriers, 3) developing contact with business/industry/governmental sources of internships and employment, 4) removing barriers to access the environment, and 5) supporting personal autonomy for decision making and for plans of action (Schifani, Anderson, and Odle, 1980).

The thrust of supportive services as staff responsibilities can be divided into three components: 1) administrative, 2) liaison, and 3) advisement/ advocacy. The administrative component includes: 1) preparing budgets and grants, 2) reporting to the chief administrator about Section 504 compliance, 3) reviewing policies about admissions, instruction, evaluation etc., and 4) serving as a fixed point for information and referral. An additional responsibility is to promote handicapper awareness among all elements of the educational community. The liason component involves maintaining close working relationships within the school structure and with relevant non-school and community agencies. These activities include: 1) arranging transportation, 2) securing sources of financial aid, 3) consulting with instructors, 4) advising on modifications of physical plant, 5) obtaining resources and service from outside agencies, and 6) advising middle-management administrators of helpful policies. The advocacy/advisor function assists students in curriculum selection and in pertinent personal/career counseling (Hohenshil, 1979).

Understanding Consumer Preference

Consumer preferences provide guidance for program design, which can

can be sought for preferred services and preferences for placement by interviewers of handicappers. A review of services deemed helpful by gifted handicappers is roughly divided into those associated with advisement/counseling and those associated with instruction (Maker, 1977; Gerken, 1979; Hohenshil, 1979). The following are examples:

Advisement/Counseling

Job seeking

Job interviews

Course selection/registration

Career selection

Instructional modifications

Arrangement for "specialized" training in mobility, sign language, braille etc.

Academic/career progress

Parent consultation

Management of IEPs

Personal adjustment

Arranging referrals to agencies

Instructional

Health care and maintenance

Typing

Errand services

Equipment repair

Library use

Obtaining texts

Obtaining readers, note takers, interpreters

Tutoring

Transcription of text to tape

Arrangement for test taking

Identifying accessible classrooms

Attendant care

Parking/transportation

Obtaining specialized equipment (i.e., talking books, calculators etc.)

This resumé reinforces the need for individual consultation with the student. It is interesting to note that technology developed for one specific population emerges as helpful for another. For example, the use of talking calculators, tape recorders, talking books etc., for visually impaired persons is gaining use by learning disabled persons to compensate for impaired visual perception. Mobility tactics are being designed for the hearing impaired and so forth.

The preferred educational preferences of gifted handicappers have been summarized by Maker (1977) and Whitmore (1980). There are data on populations of physically, visually, and hearing impaired; however, less data are available regarding gifted students with learning or emotional problems. It appears that these learners were either less willing, or less available, for follow-up interviews.

The physically impaired (handicappers and parents) expressed a clear preference for inclusion in programs for the gifted and talented as contrasted to programs for the physically disabled. Their opinions and experiences

indicated that modifying access to gifted programs was more easily accomplished than was restructuring an existing program for the physically handicapped, responding to accelerated development and demonstrated abilities. The report suggests that gifted students were ready and mature to accept another able person who might also have impairments. This acceptance even extended to co-curricular functions. Parents and handicappers reported that modifications were frequently too extensive, and advised consulting with the family prior to classroom modifications.

As a group, the visually impaired preferred inclusion in programs for the gifted and talented. Intellectual stimulation was a prime consideration for them. If necessary, they could advise their teachers about mobility, optical aids, and/or braille. A pertinent priority did emerge, and it related to prevention of verbalism, which overviews the visually impaired person's inclination to adopt descriptions of the world based upon a sighted world's standard. Tactile, auditory, or olfactory reference points should be encouraged.

The hearing impaired reflected a preference for dual enrollments. They indicated that inclusion in gifted programs could be assisted by the following factors: 1) sharing notes, 2) using clear visual aids, 3) rephrasing questions, 4) using independent projects, 5) requiring speakers to face pupils to assist speech reading, and 6) using students as interpreters.

All three groups agreed that educators were helpful. These pupils endorsed learning to: 1) engage in vigorous, physical exercise, 2) cope with fatigue, 3) make simple repairs, 4) utilize appropriate technology, and 5) acquire self-esteem through self-directed task commitment.

Educational provisions for gifted persons labeled as emotionally impaired have been skirted and neglected. Gifted educators have been reluctant to confront the problem, given their preoccupation with the image of the well-rounded gifted. Furthermore, there is a preoccupation with organizing programs for non-handicapped gifted pupils (Whitmore, 1980). However, there is evidence that quality programs for gifted learners do reduce the incidence of maladjustment among gifted learners (Maker, 1977).

A similar lack of understanding also exists for the gifted pupil described as learning disabled. The emergence of the Whitmore (1980) text has provided a valuable resource. She offers a forceful presentation for the individualized instruction for gifted learners who experience learning and/or emotional disabilities. Both Whitmore and Maker provide a sound rationale to support the premise that early intervention is a means to prevent vulnerability to unnecessary stress. They also agree that such programs effectively nurture abilities.

Another area of consumer preference relates to assessing consultation needs of educators. In general, consultation is a process of interviewing to determine a district's current operations. The results provide a base to decide about future support systems.

House (1980) advanced a survey form with twenty-five items to summarize current school practices. The items cluster around school practices and policies, such as: 1) budget for specific expenditures, 2) coordination to monitor pupil development, 3) staff preparation and extent of in-service, 4) curriculum related to the five abilities of the Federal definition, and 5) time available for personalized career and adjustment counseling for gifted

pupils. The scale has numerical ratings for each item to provide an index of current provisions.

Clark (1979) provided a twenty-one item survey form to assess prevailing attitudes toward the gifted student within a district's staff. The survey is divided into about ten items assessing positive attributes, and eleven items center around sources of underachievement. The survey could help plan for in-service.

Gaining feedback from consumers (i.e., learners and parents) and from front-line providers (i.e., teachers and building personnel) can provide priority areas to pre-plan for in-service. It can also provide baseline data for subsequent program evaluation.

Michell (1980) reported the results of a survey of the fifty states regarding gifted education. He received replies from all state departments of education. Overall, he estimated that programs were "thriving," especially as compared to the results of a 1976 survey. The bright spot was that forty-five states offer: 1) legislative provisions, 2) state coordinators, and 3) increased funding. Areas of concern were: 1) the lack of teachers, 2) the issue of certification, 3) the back-to-basics movement, and 4) the issue of funding. He points out that states housing the gifted within special education programs reflect less vulnerability.

Other bright spots are the emergence of activism among private foundations and an increase in corporate gifts. According to Drum (1980), such sources should augment school resources rather than supplant them. The possibility to sponsor a "model" program which can be exported seems very

attractive to such sources. As options develop for the gifted, hopefully options will arise for the gifted handicapped.

Both Michell (1980) and Drum (1980), support consumer involvement. They also pay tribute to in-service as a means to build quality programs.

Effective Classroom Environments

The day-to-day practices which educators employ with learners reflect the design of effective environments for learning. This section's content is intended to alert both educators of the gifted and those of handicappers to the common bonds of competency.

Comprehending Positive Presumption

Positive presumption connotes a legal principle to choose the teaching option of greatest benefit to the person. In psychological terms, it means to promote a positive self-concept and an internal locus for control. In educational terms, it is reflected in the expectation and behaviors of educators toward pupils and the family.

Teachers should extend this benefit of positive presumption about their willingness and competence to respond to gifted handicappers. The difficulty may well be that teachers do not know how their existing competencies apply. Teachers may feel that such knowledge lies outside of their preparation and experience.

Positive Presumption and Educators

Barry (1974) outlines valued ways in which gifted handicappers and their families have perceived teachers. Her review offers guidance to educators. Specifically, she praises teachers for their unwillingness to tolerate discrimination, for their competency in instruction, and for their willingness to prize differences. Such teachers conduct activities designed to desensitize "majority" persons to the needs of handicappers, participate in advocacy efforts designed to eliminate handicappism, and use individual-

ized education. This third behavior was further described as using practical guidance to help pupils cope with specific obstacles in pursuit of their goals.

Biklen (1976) identified examples which illustrate the ways in which educators can function as advocates and as instructors. These examples complement Barry's resumé in that educators can: 1) eliminate those conditions which make people dependent, 2) seek others as allies to effect change, 3) learn to curb pity, 4) acquire empathy for the life experiences of handicappers, and 5) learn to involve competent volunteers to teach handicappers. They may also need to endure a certain isolation from those who are threatened by change.

Positive Presumption and the Family

A central principle here is to recognize that parents of gifted handicappers have learned valuable lessons in the management of their child. This principle is well recognized in gifted education. The National Association for Gifted Children and the Gifted Child Society are examples of informed and dedicated parent-led organizations. There are numerous examples of similar associations of parents organized around specific disabilities/handicaps.

The principle of using the parent as consultant and parent helps in adapting and planning instruction. Presumptions about parents of handicappers may be an obstacle. For example, there may be the inclination to project one's own feeling about being the parent of a handicapper. The result may be pity, helplessness and so forth. By contrast, Rams (1975) observed that families exhibit a variety of reactions, not just passive ones, to crisis,

such as retribution, inevitability, or probation. According to Rams, parents of handicappers use various tactics and creativity to solve problems because of a belief that experience has meaning, even if that meaning is not always readily comprehensible. The parent trusts that the present and future are within one's span of control.

Parents can also be presumed to provide resources for educational planning. Lusthaus and Lusthaus (1980) identified specific contributions parents can make. They suggest that planning for mainstreaming requires the active involvement of the mainstream educators and parents. A non-helpful approach is to assess the child's readiness for inclusion by putting the burden of proof upon the child. They observed that a more helpful approach is to assess the readiness of the school system to accept the handicapper.

The family can contribute to clarifying expectations for placements. Parents can be valuable allies to communicating their child's reactions and specific needs. A responsive act of the teacher is to establish respect for home/school communications.

Positive Presumption and the Handicapper

The emergence of the notion of least restrictive environments has generated handicapper awareness among educators. Winschel (1980) observed that mainstreaming can be a positive force in education. He advised teachers to use "learner" as the only appropriate label, and that the appropriate learning environment is one geared to the joy of learning. He considered important and relevant curriculum emphases for the handicapped and non-handicapped to include: 1) language development rather than word attack

skills, 2) problem-solving rather than computation, and 3) helping others rather than personal adjustment.

Blatt (1980) cited the education of Helen Keller to illustrate perceptions about education. He observed that Helen Keller sought an understanding of herself and her world. Of course, there was an Anne Sullivan, a gifted teacher, and there was an interaction. It was Anne Sullivan's determination and expectations for achievement that mattered.

Nathanson (1979) identified examples of positive presumption about handicappers which paralled those of Lovitt (1980). Both proposed looking past the label ascribed to persons to fulfill school code requirements.

Lovitt devoted attention to the myths attached to labels, especially those myths which limit expectations for achievement. He emphasized teaching handicappers does not require more patience.

Nathanson's (1979) article is instructive in its attention to presumptions reflected in everyday language. Positive presumption builds independence, respect for accomplishment and encourages the pursuit of goals. Such statements as the following identify dependence and limitations:

- If your condition happened to me, I'd fall apart.
- I don't know how you manage to get along.
- Don't worry about your assignments; you have enough to worry about.
- I know it's difficult for you; I'll handle it.
- I know best; you just listen.
- You're miraculous; you've done it all by yourself.

These declarations reflect and deliver messages, which range from amazement

regarding a handicapper's capabilities, to the exercise of control over decisions which might more properly belong to the handicapper.

The positive alternative includes attending to the person as a person. Attending to the handicapper's enthusiasm and anticipation in confronting challenges also helps. Educators can encourage working out reasonable plans for action, according to Nathanson (1979). Finally, there should be the honest recognition by helpers to anticipate anxiety from working with handicappers. This feeling is not to be ignored; rather, the positive response is to recognize feelings. A further step may be to seek consultation.

Selecting Instructional Options

Basic references in gifted education (i.e., Gallagher, 1976; Clark, 1979) have examined past and current practice identifying two standard modifications of school practice. One is labeled acceleration, and the other is labeled enrichment. The use of these practices can be determined through the IEP process. These are not either-or. A learner might well experience both in his/her IEP, as well as in regular grade progress through some content areas.

A third option is the degree to which teachers direct pupil learning as opposed to encouraging pupil initiation in learning and self-direction. Tactics of teacher direction focus upon goals, content, and activities designed to promote trust. These tactics enable the gifted handicapper to develop self-confidence to succeed in school tasks, as well as to acquire relevant skills (Whitmore, 1980). Pupil initiation describes those tactics which remove obstacles to pupil readiness, aptitude, and task commitment (Birch, 1979).

These three options are within the span of both the IEP team and the teacher's control. Selecting these options is based upon the principle of matching relevant pupil attributes and aptitudes with relevant school attributes and resources.

Understanding Enrichment

Enrichment frequently becomes a misunderstood tool, according to Passow (1979a). A random collection of games, add-on assignments, or an "extra" report are mistakenly seen as this tactic. In general, enrichment describes an expansion of curriculum for prescriptive purposes to develop pupil interests, cognitive skills, and/or synthesis of complex topics. Passow paid tribute to Renzulli's (1977) work in clarifying enrichment as a genuine instruction intervention.

Renzulli (1977) identified three types of enrichment. General exploratory activities refer to tactics such as learning centers to arouse and to widen interests. Out of these activities come Group Training Activities, which stress skills in thinking processes and in affective activities. Type III activities center around the Investigation of Real Problems. This type of activity enables the gifted student to emulate the behaviors of professionals, characterized as investigators. The product should meet and fulfill the standards of a given discipline or profession.

There is reason to believe gifted handicappers are capable of Renzulli's (1977) Type III projects. Sellin and Birch (1980) identified pertinent factors to be considered by an IEP team, such as:

Pupil-centered:

- Motivation for product orientation
- Readiness for the role of investigator
- Tolerance for long-term, sustained pursuit
- Sufficient maturity to pursue a "contract" system of evaluation
- Sufficient skills to conduct investigations
- Mastery of standard content to engage in analysis of content beyond that usually expected of pupils

School-centered:

- Curriculum is explicit in its grade level expectations
- Evidence of inventory of school and community resources
- Evidence of inventory of resources for product recognition and outlets
- Recognition that learners can be producers regardless of age
- Tolerance for the exploration of ideas not usually found in the curriculum
- Accustomed to flexible scheduling
- Availability of support services for teachers

These are factors which support Renzulli's (1977) Type III activities. A continuing challenge is to find solutions to overcome the lack of school resources in order to respond to high pupil readiness.

Understanding Acceleration

Just as there are types of enrichment, there are types of acceleration. In one type the learner moves ahead without respect to the lock-step of

grade level expectations, which can be characterized by early admission to school and/or college. It can also mean grade advancement. Another type is to maintain regular grade enrollment but to complete curriculum requirements through advanced placement courses, or through Saturday sessions at a nearby college. A third type is a mixture in which learners may experience advancement in some content, but not in others.

Stanley (1976) recognizes, as does Passow (1979b), that opposition to acceleration is based upon myth. Another source of opposition can be an educator's own personal experience with unsupported acceleration. Both observed that schools do recognize the appropriateness of altering curriculum pace for mentally-retarded learners. They suggested that advancing curriculum pace should be equally common for mentally-advanced learners.

Sellin and Birch (1980) reviewed available literature regarding the relevant factors an IEP team should consider. They identified the following:

Pupil-centered:

- Learner is motivated
- Content is not dependent upon life experience
- Education offers evidence of:
  - substantial achievement beyond CA peers
  - learner's ability to master learning rate, retention, and transfer
  - expected learning/achievement beyond reasonable expectations for the regular grade teacher to manage
  - encouraging career opportunities
  - counseling families about available financial aid
  - access to resources
  - being in the best interests, psychological and educational, of the learner

School-centered:

- Education possesses criteria to assess mastery levels for advanced placement
- Education offers policies for acceleration throughout the entire school district
- Education alerts teachers to the needs of younger pupils in advanced classes
- Education is tied to a local institution of higher education
- Education is tied to local preschools
- Education recruits competent volunteers
- Education offers support systems for teachers

Again, a relevant challenge becomes closing the gap between pupil readiness and school resources. Dimensions of overlap between the two options include: 1) analysis of the school's standard curriculum content and expectations, 2) support systems for teachers, 3) inventory of school and community resources, 4) commitment to coordination, and 5) family involvement.

Teacher-Pupil Relationships

The standard tactics of instruction for the gifted should not possess mystique. In fact, these tactics are within the competencies of teachers. Gallagher (1976), Clark (1979), Whitmore (1980) and McKeachie (1978), among others, provide ample guidance. Sellin and Birch (1980) divided these tactics into teacher initiation (building trust and orientation for success) and tactics which encourage the teacher as a guide/mentor for pupil's task commitment and maturity. A partial listing of these tactics is summar-

ized as follows:

Teacher initiation:

- Readings
- Discussions
- Exhibits
- Inspections
- Lectures
- Visitations
- Audio-visual aids
- Demonstrations

Pupil participation:

- Dramatizations
- Role playing
- Simulations
- Laboratory
- Learning centers
- Interviews
- Experimentation
- Investigations
- Internship
- Externship

An important resource is the use of competent volunteers to enter into a supervisory relationship with gifted pupils. This tactic is commonly labeled mentoring. It is employed in internships and externships. (It should be noted that gifted pupils can be mentors, as well.) Albert (1980) documents the eminence of gifted handicappers and non-handicapped gifted persons as attributed to the early recognition and nurturing of abilities by an adult role model. This mentoring pattern has existed around the family and the formal school system.

A pertinent issue becomes applying mentoring to gifted handicappers. The mentor need not be a handicapper, but needs only to be competent. There should be ways to involve gifted handicappers as mentors for the non-handicapped as well.

Identifying Tactics of Congruence

There are, indeed, ties that bind the individualized education for gifted handicappers to that of gifted non-handicappers. A first step in the discovery of common bonds is to recognize what technology can accomplish and what it can't. A misunderstanding may exist that inclusion of gifted handicappers awaits and/or is dependent upon technology. The key idea is to recognize that gadgets should not substitute for the teacher/learner relationship. Technology is a means, not an end for learning.

Proven instructional tactics for gifted learners can also be appropriate for gifted handicappers, which further builds congruence among educators of varying specialists.

Technology is a Third of the Solution

Preplanning for the inclusion of handicappers in the least restrictive environment involves considering advances in technologies, especially those technologies directed toward education. Spin-offs from the Space Age have had their applications for the handicapped. The sources which follow reflect a common application of technology and are only part of the solution to their use.

One part of the solution is to locate sources of information about technology. The difficulty for handicappers and their advocates is to stay informed about new developments.

The other part, aside from use and location, is to avoid the seduction of technology. This seduction minimizes the role and status of teachers. Technology, though exciting, is only a means. The outcome of the relationship between teacher and pupil counts most. Technology serves to facilitate

that relationship, not to dominate it. Furthermore, technologies do not, by themselves, reduce stereotyping. Stereotypes about competency in science and handicappers will remain unless information is acquired by teachers and counselor-educators. Chemists can be blind, and physicists can be deaf. Technology has helped to convert light to sound, and sound to light. However, the need exists for counselor-educators to become informed about these advances (Redden and Schwandt, 1976).

Technology is not confined to science and mathematics. There is a similar pattern of organized activity in the arts and humanities for handicappers, as well (National Committee, Arts for the Handicapped, 1977). Their report also emphasized the need to overcome stereotypes. For example, it is possible for cerebral palsied persons to become skilled weavers.

The Library of Congress Report (1980) noted that the appropriate use of technology starts with understanding its categories and its purposes. Also, the use of a particular device is an individual choice, based upon personal preferences, aptitudes, and environmental circumstances (i.e., travel canes are difficult in the snow).

The Library of Congress Report (1980) identified at least three broad purposes of technology: to restore, to facilitate, and to augment. These purposes serve the handicapper in the following ways:

- To restore -- to cure usually through surgical, medical, or therapeutic intervention
- To facilitate -- to use a prosthetic device or compensatory management which enables the person to function despite impairment

- To augment -- to use a supplement to strengthen impaired areas of function

Technology can be applied to life functions, which include: 1) access to information, 2) classroom/laboratory participation, 3) rehabilitation, and 4) environmental access.

The handicapper and his/her advocates do not lack for sources of information. The difficulty lies in access to information about the availability of aids for restoring, facilitating, and/or augmenting. A partial listing of informational resources includes:

- National Library of Medicine
  National Institute of Health
  8600 Rockville Pike
  Bethesda, Maryland 20209

- National Library Service for the Blind
  and Physically Handicapped
  Library of Congress
  1291 Taylor Street N.W.
  Washington, D.C. 20502

- National Technical Information Service
  U.S. Department of Commerce
  5285 Port Royal Road
  Springfield, Virginia 22161

- Technology Utilization Program
  National Aeronautics and Space Administration
  600 Independence Avenue S.W.
  Washington, D.C. 20546

- Smithsonian Science Information Exchange
  1730 M Street N.W.
  Washington, D.C. 20036

Aside from the issue of procuring information about new developments, there are several others, such as:

1. To what extent will subsidies be developed for research and devel-

ment?

2. What balance should be maintained among the restoring, facilitating, and augmenting technologies?

3. In what ways might technologies from industry and defense be applied to education?

4. How can handicappers meaningfully be involved in the design of technologies?

5. To what extent should costs to the handicapper be subsidized?

Process Tactics

The following review samples available tactics which are representative of gifted education. Their common bond is their application to gifted and talented handicappers, which reflects congruence in teaching methods.

Physical activity and artistic performance benefit gifted handicappers. These offer benefits in their own right, as well as for promoting learning potential.

Eason, Smith, and Fagot-Steen (1979) provide a detailed description of a perceptual motor program for primary-level gifted handicapped children. Their article contained a curriculum outline and also listed helpful activities. They observed that the Terman stereotype of physical coordination can exclude otherwise gifted children who are awkward and less flexible in movement.

Sheffield (1978) described how an initial experience in a language arts class enabled a deaf student eventually to become a professional mime. This student also pursued a dual career in business management. Paynter (1979) described how athletics remains a source of satisfaction beyond the school

years for visually impaired persons. She also described the efforts of Arthur Copeland to organize world-wide interest and competitions in athletics.

Visitations and inspections widen interest and provide first-hand contact. Such tactics are possible for handicappers, and trend exists to remove barriers which have prevented full participation by handicappers. Snider (1977) has coordinated a report on behalf of the Smithsonian Institute and Museum to inform educators about tactics and procedures to encourage access to handicappers. This report details procedures to prepare handicappers for visitation, for participating in tours, and for de-briefing. It also details the communication between the facility and school staffs. Finally, it provided survey forms to enable handicappers to participate in planning and evaluation.

Creative activities, indeed, are possible for gifted handicappers. Moreover, examples can be found within all exceptions. Cady (1976) discussed creative writing methods as applicable for learning-disabled pupils. She stressed the concept of writing as an expression and sharing of self. She outlined both a step-by-step procedure, as well as a listing of 148 topics to prompt expression.

Vantour (1976) described her procedures for helping the artistically talented, gifted, learning- disabled child. She used artistic talent to build success in language arts.

Gallagher (1974) shared her experience fostering creativity with emotionally disturbed children. Her procedures involved a sequence moving from process tactics through completion of complex compositions.

A bridge between creativity and formal operations of problem solving

is offered in the procedures associated with Renzulli's (1977) Type III Enrichment, which include correlating art, music, and drama with content. These procedures can also involve attention to process activities.

Examples of Type III procedure include predicting/forecasting, decision making, and acquiring competencies in brainstorming. These tactics have been described by DeSaint-Exupery and Dameron (1980) as pertinent tactics for gifted and talented pupils. Maker (1977) described similar tactics as applicable to gifted handicappers. These two reports provide concrete instances of the common methodological bonds between the gifted and gifted handicappers.

Applications of problem solving for handicappers are widespread, and examples are found within different exceptions. Monohan, Giddan, and Emener (1978) reported how upper-level college students who were visually impaired could serve to reduce the dropout rate among incoming visually impaired students. These students shared their solutions to common problems adjusting to college life.

McGehee and Pendergrass (1979) described their application of a problem-solving model with hearing impaired students. Their application centered upon a social problem model which required these students: 1) to formulate a statement, 2) to generate possible solutions, 3) to adopt solutions, 4) to act on solutions, and 5) to evaluate results.

Problem solving can be applied to understanding the appropriateness of one's learning style. Brown (1969) described her experiences using problem solving to improve communication of teacher expectations and pupil motivation. This application becomes a six-stage sequence, designed to help cap-

able learners handicapped by learning/emotional disabilities to develop trust in their teachers as guides rather than as absolute judges.

Mentoring

Popular media and professional journals literally abound with examples of gifted handicappers' achievements. Achievement extends across the arts, the humanities, and the sciences. Enough success exists to limit patronizing responses. This reduction does not devalue accomplishment. The intent is to recognize genuine abilities do exist which can be influenced.

The type of nurturing which emerges is of active interest to another person who mentors a younger protégé. This pattern is also evident among the non-handicapped gifted. Typically, the matching of protégé and mentor has depended on accidental, chance encounters.

Rogers (1979) paid tribute to his wife, Chris, a teacher of primary grade students, whom he described as experiencing an advanced stage of multiple sclerosis. She played a dual role as mentor to handicapped pupils mainstreamed into her class, as well as a role model for the non-handicapped. Rogers also paid tribute to his wife's courage as a quiet, less spectacular kind of handicapper, who struggled to do everyday tasks with zest and with competence. Hull (1979) paid tribute to his father who helped him to view his epilepsy as a tiger to be conquered. His career as an art educator has progressed, and his father's lessons have remained with him.

Potok (1979) can be described as an artist in two media. Originally an artist, his career had progressed to being invited to conduct an exhibition. He then became legally blind and was no longer able to paint. In his own terms, he learned to paint pictures with words, instead of oils. He acknow-

ledged the support of his wife and the realism of his social worker. He described his adjustment in terms of learning two lessons. One was that blindness is only one source of identity, not one's total identity. The other lesson emphasized that "adjustment" was not to the lack of vision but to the loss of artistic creativity. The adjustment process was learning to replace one creative outlet with another.

Wilhelm (1979) described the career of Stephen Hawking, an English physicist, who is credited with the first major paper on "Black Hole Explosions." Hawking's life goal, in his words, is a complete understanding of the universe. At age 32, his theories had been described as the successor to Einstein's theoretical work. Hawking described himself as an indifferent student until his mentor, a professor, shocked him into the pursuit of science. Hawking was motivated to live up to this professor's belief in him. Hawking's physical condition required him to dictate to others, who wrote down his notations. However, his focus is upon his roles as scientist and as a father and husband. He does not deny his condition; he views it as one particular role.

The U.S. Office of Human Development (1980) has established a formal internship program to prepare broadly based managerial personnel. It has extended its internships to handicappers with high potential for management. While experience is limited, its sponsors report that adjustment concerns learning to cope with one's own internal sense of accountability. This means that one's performance is measured daily and with intensity. Also, there is motivation to succeed to provide a model for other handicappers, not merely for personal gains. A related dynamic teaches that failure and disappointment are opportunities to profit.

The use of formalized internships can provide a planned context for mentoring. Such formalization increases the availability of this helpful process. A relevant issue becomes finding ways to organize mentoring for gifted handicappers. A related task is to find appropriate ways for gifted handicappers to mentor others, handicappers and non-handicappers, alike.

Eliminating Handicappism

Describing Handicappism

The "isms" of sex, race, age, and other attributes of human existence offer counterparts to handicappers. In fact, Heward and Orlansky (1980) defined handicappism as:

> ...those attitudes and practices that lead to unequal and unjust treatment of people with disabilities. (p. 12)

It is possible to identify attitudes and practices which present unnecessary limitations for the handicapper. There is a measure of relief available to handicappers and their advocates for responding to unjust treatment. However, a starting point to eliminate handicappism is directed toward attitudes and practices.

Identifying Preferred Practices of Representation

The Impact of Language

Language has the power to influence behavior. This influence extends to the handicapped and the non-handicapped. Brown (1975) identified the impact of language upon handicappers. Brown focused upon the impact of these influences upon the non-handicapper's conditioned expectations of performance, as well as the creation of unnecessary separation and isolation. Another focus was that language affects the handicapper's self-concept. Because handicappers live in a real world, they experience and absorb the subtle and not so covert implications of language.

Examples of language which restricts readily abound. Brown observed differences in language. For example, a person is confined to a wheelchair.

Also, a person suffers from epilepsy, as contrasted with a person who experiences seizures. Brown observed that the intent is not to soften descriptions; rather, the intent is to promote accuracy in descriptions.

Words that Devalue

Children and youth learn in the home, school, and community. The everyday language of learning, according to Mullins (1979), suggests expectations and value. Everyday language, especially textbook language, produces incidental ideas about handicappers. Examples of words that devalue were listed by Mullins (1979) and can be summarized as follows:

1. Intellectual handicaps: dumb-bunny, moron, retard, lame brain,* bird brain, and sped.

2. Emotional handicaps: crazies, mad scientists,* nutty, unhinged, and ding-a-ling.

3. Sensory handicaps: turn a deaf ear, deaf or blind to reason, lacking vision for the future, myopic point of view, blind rage,* evil eye, blind as a bat, and fish eye.

4. Physical handicaps: foam at the mouth, lame duck, a basket case,* spineless person, and crippled by a stroke.

Making Language Work

Mullins (1979) expanded upon Brown's (1975) example of language's impact. Consider the differences between "Alvin, a blind man, is a musician" and "The musician, Alvin, is blind." Also consider, "Joanne is deaf and has to use a hearing aid," which suggests restriction and imposition. Consider,

*The terms marked with * illustrate a double devaluing. The term devalues two groups.

"Joanne can hear very well by using her hearing aid." The word using has a positive effect.

One starting point for teachers can be to become informed and sensitive about the impact of their own language. Another starting point is to examine the instructional materials in use in their own curriculum expertise. Finally, another starting point is to alert their own pupils about the impact of such representation of differences.

The National Center on Educational Media and Materials for the Handicapper (1978) has prepared guidelines for educators. Their suggestions are summarized as follows:

1. In print and nonprint educational materials, ten percent of the contents should include or represent children or adults with an exception.

2. Representation of persons with exceptions should be included in materials at all levels (early childhood through adult) and in all areas of study.

3. The representation of persons with exceptions should be accurate and free from stereotypes.

4. Persons with exceptions should be shown in the least restrictive environment. They should be shown participating in activities in a manner which will include them as part of society.

5. In describing persons with exceptions, language should be nondiscriminatory and free from value judgments.

6. Persons with exceptions and persons without exceptions should be shown interacting in mutually beneficial ways.

7. Materials should provide a variety of appropriate role models for

persons with exceptions.

8. Emphasis should be on the uniqueness and worth of all persons, rather than on the differences between persons with and without exceptions.

9. Tokenism should be avoided in the representation of persons with exceptions.

10. Positive examples would include:

    a. The study of hearing aids as part of an electronics unit

    b. The use of prosthetic devices as examples for physics, physical education etc.

    c. To present sign language as an alternate form of communication

    d. To generate math problems using insulin measurement

    e. To display and to depict various careers of handicapped persons

    f. To present handicapped and non-handicapped persons in situations of mutual enjoyment

This summary is only a listing. Educators are urged to contact the Center to obtain the full description of preferred practices for representation.

Identifying Resources

Types of Resources

Parents, educators, and handicappers do not lack organizations and associations for consultation for help with problem solving. We need to become aware of these organized resources. The efforts and services of specific organizations devoted to a specific disability should be well known to parents, the handicapper, and to specialists in individualized education for

the handicapped. In a similar way, the specialist in gifted education should be aware of organizations (such as Mensa, Gifted Child Society, National Association for Gifted Children, and the TAG Division of the Council for Exceptional Children) promoting the cause of gifted and talented. Furthermore, educators should have ready access to specific agencies within the U.S. Department of Education.

Two resources might be less well known to educators, parents, and handicappers. One of these is private and voluntary organizations which serve handicapped persons without regard for specific disabilities. These organizations orient themselves to various exceptionalities.

Another type of resource could be organizations which serve the non-handicapped, or which promote and/or pursue a mission apart from direct involvement with the handicapped. Certain organizations within this group maintain significant emphasis on handicapper concerns.

The listings which follow illustrate such organizations, but the list is not an exhaustive recounting. The criteria for selection included, the organization: 1) addresses one or more attributes of the federal definition, 2) exhibits visible emphasis upon handicapped persons, 3) serves more than one disability, 4) provides consultation or information for educators and/or the handicapper, and 5) has been surveyed personally by the present writer through inquiry or participation, which, of course, means the writer possesses first-hand information and has not depended upon printed materials alone.

Identifying Resources of Multi-Handicapper Consultation

Five organizations emerge as agents for consultation, information, and/or

support for research/demonstration projects. These include: 1) American Coalition for Citizens with Disabilities, 2) National Information Center for the Handicapped, 3) Psych-Ed Corporation, 4) Foundation for Exceptional Children, and 5) National Committee on Arts for the Handicapped.

The American Coalition of Citizens with Disabilities is located at 1200 Fifteenth Street, N.W., Washington, D.C., 20005. Its avowed purposes are referral, advocacy, and information distribution. Its membership includes disabled persons and organizations of and for the disabled. Its objective is to improve the human and civil rights of all Americans, including those with disabilities.

The National Information Center for the Handicapped, Washington, D.C., 20013, is the publisher of Closer Look, which serves as a clearing house for parents and advocates on topics of educational rights. This publication provides topical articles on trends and standards for programs.

Psych-Ed Corporation, 20 Providence Street, Boston, Massachusetts, 02116, addresses a broad range of family concerns in its non-technical journal, Exceptional Parent. It relies upon experts from many disciplines and professions, as well as on testimony from parents, for its articles.

The Foundation for Exceptional Children, Reston, Virginia, 22091, is a creation of the Council for Exceptional Children. It serves to promote awareness as well as research and demonstration efforts. Its declared emphasis is upon both the gifted and the gifted handicapped.

The National Committee on Arts for the Handicapped, 1701 K Street, N.W., Washington, D.C., 20008, is devoted to information and project sup-

port. It serves to remind non-handicappers that genuine talent (e.g., art, music, and physical movement) are not flukes. It also promotes the arts as avocational pursuits. It provides funding for demonstration projects which widen or strengthen opportunities.

Identifying Resources of Generic Interest

At least three organizations can be identified which have expanded their staff and resources to assist handicappers in professional development and training. These organizations are the American Association for the Advancement of Science, the American Association of Colleges of Teacher Education, and the American Association for Higher Education.

The American Association for the Advancement of Science, 1776 Massachusetts Avenue, N.W., Washington, D.C., 20036, maintains an Office of Opportunities. This office provides leadership to eliminate physical barriers for handicapped scientists. Its Resource Directory of Handicapped Scientists is a comprehensive listing of all persons engaged in all phases of science and science education. The AAAS also provides consultation regarding expanding opportunities and techniques in science education and science-related careers. The directory, itself, explodes career stereotypes about handicappers.

The American Association for Higher Education has established Project HEATH, Higher Education And The Handicapped. This project provides consultation regarding the need to expand access to higher education. Project HEATH, 1 Dupont Circle, N.W., Washington, D.C., 20036, serves as a clearing house for implementing Section 504 (see next section).

A spin-off of Project HEATH has been undertaken by the American Association of Colleges of Teacher Education, 1 Dupont Circle, N.W., Washington, D.C., 20036, the purpose of which is to compile a listing of disabled educators. This should provide practical guidance to expand opportunities in education.

The listings here are but a minimum; however, prospects for resources for informed advocacy are promising.

Understanding Advocacy in All Its Dimensions

Leadership

Advocacy has become a watch word motivating a range of reaction from the educational community. Professionals incline to see advocacy as evoking an adversarial relationship. Both advocates and recipients of advocate services need to remind themselves that advocacy's Latin roots refer to speak in favor of.

Consequently, advocacy intends to offer positive action. It does not connote negative resistance and/or out-of-hand opposition to authority. Advocacy prizes problem-solving and positive-action tactics.

One significant indicator of the effectiveness of advocacy on behalf of handicappers has been a shift from organized advocacy for the disabled to organized advocacy efforts by disabled persons. Professionals, parents, and citizen volunteers can take pride in the fact that disabled persons have found sufficient independence to assume responsibility to advocate for their own needs. Consequently, there are now common alliances, confederations, and coalitions of the handicapped and non-handicapped, alike.

Lattin (1980) provided practical guidance to advance cooperative advocacy efforts. Her comments can be comprehended as principles of leadership rules for handicappers. Lattin observed that handicappers can serve as consultants to organizations of the non-disabled, such as the American Association for the Advancement of Science, as well as to organizations for exceptional learners, such as the Council for Exceptional Children. Obviously, disabled persons serve as leaders in their own organizations.

The qualities of leadership in handicappers were identified by Lattin. These attributes could be instructive to educators to prepare gifted handicappers for leadership roles. A significant attribute, identified by Lattin, was commitment. Other attributes were nondestructive dissent and accountability.

Commitment was described by Lattin as the willingness to endure defeat. It is the willingness to attend to and to complete mundane tasks in order to achieve larger goals. Lattin also described commitment as the willingness to serve on the "reserve team" as backup to the organization.

Any organization experiences disagreement. Leaders are free of the need for personal recognition. Such persons also recognize that intimidation is not appropriate. On the other hand, dissent should be constructive. Leaders should provide constructive alternatives.

Accountability has several dimensions, one of which suggests that leadership should be earned through service and commitment. Members should recognize leaders rise through effort, not capriciously. By contrast, leaders should recognize they are responsible to actions and to obtain results. Lattin noted that leaders who are disabled know that disability in itself

provides no automatic qualification to be a spokesperson or consultant. Acceptance as a leader depends upon competence.

From her numerous experiences as a leader who is also disabled, Lattin observed that the leadership of disabled persons is a valuable resource. She noted that organization and self-motivation may be a means to widen participation. When effective leadership is exercised by disabled persons, according to Lattin, promising prospects can be prevented from becoming new problems of fractionated effort.

Sawish (1980) observed that responding to crisis involves leadership attributes and creative problem solving. He urged that assessing creativity in handicappers could be directed toward the tactics of compensation and coping with obstacles. This approach might be translated into paper/pencil tests.

A Legal Context

Educational opportunities for the handicapped have advanced with the assistance of judicial relief (Dybward, 1980). Interest has arisen in the extent to which equal education protection for the handicapped and for minority group learners can be applied to the gifted and talented. Baer (1980) has advanced his informed opinion about the applicability of this concept for the gifted.

Baer reviewed the same sources as Dybward (1980) and concluded there would be limited correlation between minority and handicapped learners and the gifted. He did, however, advance a promising line of reasoning based upon the Fourteenth Amendment and its due process and equal protection clauses.

According to Baer, gifted persons have experienced simple access to general education while the handicapped and minority learners have not. Obstacles to "special" programs for the gifted have been: 1) a reliance upon a narrow band of IQ for admission (despite professional opinion), 2) an access to equal opportunity, and 3) the suitability of educational programs. This latter point was identified as the most promising line of pursuit.

Baer observed that quality and appropriate education for all learners does not exist as a right. Learner rights are currently viewed as including the following: no-cost education, protection from school exclusion based upon test scores, and relief from discriminatory practices based upon racial, sexist, language, and/or disability differences.

The promising prospect of advocacy for gifted students is the pushing for rights of all learners to experiences which broaden knowledge and heighten skills. Education which supports individualization of education should be a right. If this were affirmed for all pupils, then the rights of gifted students could be affirmed, as well.

An unresolved question has been the application of PL 94-142 to address superior abilities of handicapped pupils. There are more than adequate provisions to assess and to provide services directed toward individualizing pertinent instruction of disability and handicap dimensions. The extent to which the concept of appropriate education would require components of gifted education is unclear. Some states, Pennsylvania, for example, have chosen to include the gifted within its PL 94-142 provisions.

In addition to PL 94-142, the 1973 Vocational Rehabilitation Act provides a measure of protection. Section 503 addresses employment, and Section 504

addresses access to education.

Harris (1979) outlined significant provisions of Section 504. Institutions of Higher Education are obligated in these areas. First, no otherwise qualified student shall be denied admission. Second, there is a requirement that physical barriers must be removed to prevent inaccessibility. Finally, the method of instruction must be considered. Such methods can include: 1) length of time to complete requirements, 2) substitution of specific requirements, and 3) provision of auxiliary aids.

Harris noted that Section 504 does not alter course content. Furthermore, this section does not relieve the handicapper from reasonable admission standards. Its spirit is to remove discrimination and to provide access. Harris (1979) observed:

> ...while we have made progress, we still have a long way to go to ensure that discrimination against the handicapped is completely eliminated, and that disabled people are brought as fully as possible into the mainstream of American life. I am confident that colleges and universities throughout the country will continue to honor both the letter and spirit of Section 504. (p. 10)

Affirmative Action

The 1973 Rehabilitation Act, and particularly Section 504, can be viewed as providing handicapped persons protection from discrimination solely because of their disability. Flygate (1979) described this protection as a dual emphasis upon 1) affirmative action and 2) otherwise qualified handicapped individuals. A 1979 decision of the Supreme Court reviewed these two ideas as applied to higher education admissions. The Davis case was confined to professional training, specifically to nursing.

Flygate labeled the decision a "block buster" since it appeared to sanction denial of admission to professional training based upon the person's handicap. Furthermore, the decision seemed to relieve the college of any responsibility for affirmative or positive acts to modify standard program requirements and instructional practices.

The essence of the case centered upon a denial by a college to admit a deaf person to a nursing preparation program (at the RN level). She could hear only gross sounds and conversation could be carried on only when she directly faced the speaker.

The decision of the Court revolved around the following inter-related issues:

1. Admission based solely upon academic and technical qualifications without respect to hearing ability.

2. The freedom of the institution to require reasonable physical qualifications for admission.

3. Affirmative action versus nondiscrimination.

The outcome of this case was to uphold the institution's right to deny admission to this deaf person. This result, according to Flygate, was that she did not fulfill the criteria of an otherwise qualified handicapped person. The intent of Congress was interpreted to mean that disability, alone, is not sufficient ground for denial. Her claim to be a practicing and effective licensed practical nurse was seriously disputed. The court inferred that her employment record cast grave reservations about her competence to perform duties in a safe manner. In this sense, she was perceived <u>not</u> to be an otherwise qualified handicapped person. Flygate concluded that the case

represented an isolated instance rather than being a precedent for either deaf persons, or for all handicapped persons.

Dystel (1979) provided an analysis of both the Davis case and the Tragesor decision, a case which involved a registered nurse who was dismissed because of failing eyesight. The court ruled Section 504 did not apply since federal funds were received for the services rendered, not for employment. The decision arose because 1978 amendments to Section 504 tied its civil rights protections to the 1964 Civil Rights Act. According to Dystel, the intent of Congress was to strengthen, not weaken, anti-discrimination to otherwise qualified handicapped persons.

The analyses of Flygate (1979) and of Dystel (1979) are not much comfort and/or security for handicapper advocates. There was agreement by both sources that the Davis case was an individual case based upon individual circumstances. By contrast, the Tragesor case created confusion regarding Congressional intent for affirmative action and non-discrimination. Dystel concluded the intention was to ensure protection, and that courts have not recognized this intention.

A pertinent lesson is that laws, alone, are not sufficient protection. There is an urgent need for vigilance.

EPILOGUE

This epilogue is intended to identify those issues which constitute an agenda to continue action and to identify those trends, or prospects, which can serve as starting points. Future action might take the form of subsequent reviews of literature for specific gifted handicapper populations. Another direction might be to consult the sources of this paper as a basis to organize and to deliver services. I hope the structural outline of this monograph provides a framework to account for relevant features for decision making and programming.

When this review was undertaken, I was aware of the social psychology of the handicapped. I was also aware of the consequences of labeling, including the labeling of gifted. What was not anticipated was the extent to which stereotypes exist as an obstacle to organizing services for gifted handicappers. Such persons are affected by being both gifted and handicapped.

The 1978 views by Maker and Grossi, on behalf of the Council for Exceptional Children, and the 1978 report of Meisgeir, Meisgeir, and Werblo, on behalf of the National Association for Gifted Children, are benchmarks. The Whitmore (1980) text provides a practical example to follow. Other sources point to promising pre-school efforts. It is also encouraging to observe available information and advocacy efforts.

At present there are numerous resources of research, model programs, and organized advocacy. These confluent times could be well remembered as widening teacher preparation and the preparation of leadership personnel. This includes individualizing education for gifted handicappers as an integral

element of educator competency. The emergence of the Individualized Education Program (IEP) is a helpful rallying point for preparation efforts.

Finally, this project was approached with an awareness of the impact of mentoring upon the growth and development of gifted and talented learners. Its impact seems equally significant, if not more so, for gifted handicappers. As programs emerge, the selection and use of mentoring with gifted handicappers holds promise. Mentoring as a process might well be designed around an application of Renzulli's (1977) concept of enrichment: mentoring could be developed along three tracks rather than one.

These three mentoring tracks can be organized around personal relationships and intended outcomes. Type I mentoring could be organized around expanding and exploring interests, as well as friendship. Type II mentoring could be organized around skill development and practical guidance. Type III could be organized around complex undertakings and/or investigations, as well as serving as a spokesperson. Another example of Type III mentoring is the gifted handicapper's learning to become his/her own spokesperson.

There is literature on mentoring with the gifted (Sellin and Birch, 1980) and on advocacy/mentoring for the handicapped (Sellin, 1979). An unfinished agenda item is the ability of creative individuals to organize such a three-track system of mentoring.

In conclusion, I believe there are projects which provide for expanding access for gifted handicappers. The following suggestions are advanced to encourage and to urge educators and oth advocates to act. These suggestions represent the development of practical strategies addressed to:

1. Individual Education Program (IEP) - The central problem might be questioned: In what ways might the IEP required for all handicapped students be amended to focus upon dimensions of giftedness?

Improving identification procedures and expanding career education should be salient issues. A helpful project would be the development of a model IEP as practical guidance for educators to refine their present practice. Moreover, this project could include suggestions to make standard identification procedures work better, as well as to expand career education.

2. Locating Resources - The thrust of this project might be: In what ways can public and private resources at national levels be available to local educational staff?

A helpful response could be the development of a generic inquiry form which would be acceptable to national organizations. The practical outcome would be to provide educators and families with an efficient means to access scattered sources with one centralized source of inquiry.

3. Mentoring and Advocacy - The salient feature of this project could be stated as: In what ways might gifted handicappers serve as mentors for handicapped and non-handicapped persons?

Mentoring and advocacy are compatible because both processes involve a human relationship based on friendship, practical guidance, and protecting the best interests of the protege'. This could result in the publication of strategies and tactics of mentoring. Moreover, this publication would feature positive and realistic examples to implement in school programs.

4. Access - The theme of this undertaking could be expressed: In

what ways might gifted handicappers gain access to programs for the gifted without risk of losing special education services?

This topic would be oriented toward understanding the circumstances which promote a team effort among educators, educational specialists, and families. A possible outcome could be a manual of preferred practices. Moreover, this manual could contain proven examples of benefit to non-handicappers based on experience, and could stress common teaching tactics shared by educators of the gifted and of the handicapper.

These suggestions are shared freely with the intention that others might take them up. We need wide participation by creative and competent individuals.

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